

REMARKS

Applicants appreciate the confirmation that Claims 18-22 are allowed. The remaining claims are rejected as being unpatentable over U.S. Patent No. 4,778,985 to J. Everett Modisette, et al. In particular, Claims 1, 5, 7-9, 11 and 13-17 are rejected under 35 U.S.C. § 102(b) as being anticipated by the Modisette '985 patent, while Claims 2-4, 6, 10 and 12 are rejected under 35 U.S.C. § 103(a) as being obvious over the Modisette '985 patent. As described below, independent Claims 1 and 11 have been amended. Based on the foregoing amendments and the following remarks, Applicants respectfully request reconsideration of the present application and allowance of the current set of claims.

Independent Claim 1 is directed to an infrared image generation device that includes a laser light source, at least one scanner that receives laser light and is capable of redirecting the laser light, a processor that controls operation of the scanner to generate an infrared image and a target plate that displays the infrared image. If desired, an infrared sensor could monitor the target plate so as to detect the infrared image displayed by the target plate. By determining if the infrared sensor does, in fact, detect the infrared image and, if so, in what manner the infrared sensor detects the infrared image, an infrared sensor can be tested in a cost-effective manner without having to test the infrared sensor in actual field conditions which might, for example, involve the detection of the infrared signature generated by a missile or the like.

As now amended, the target plate of the infrared image generation device of independent Claim 1, is defined to have a first side that receives the redirected laser light from the scanner and a second side, opposite the first side, that displays the infrared red image. In addition, the second side of the target plate of amended independent Claim 1 is defined to display an infrared image having portions at different respective temperatures. Relative to the exemplary embodiment depicted in Figure 2, for example, the redirected laser light from the scanner can be received by the first side 23 of the target plate 18 and the resulting infrared image having portions at different respective temperatures can then be displayed by the second side 25 of the target plate.

The Modisette '985 patent describes an imaging plate structure designed to create an electrostatic image within a photoconductive layer in response to radiation. By thereafter

subjecting the imaging plate structure to scanning radiation (different than the radiation that originally created the electrostatic image), the electrostatic image may be read out electronically with electrical signals being produced that are indicative of the electrostatic charge stored by that portion of the imaging plate structure currently being subjected to the scanning radiation. In this regard, column 10, line 60-column 11, line 51 of the Modisette '985 patent describes the readout process as follows:

After the electrostatic image is established, it is read out by connecting the DC voltage source in series with the readout electronics. As illustrated in Fig. 4, scanning radiation **40** is progressively directed to the areas of the conductive layer **14** in timed relationship to the operation of the readout electronics. The readout electronics receive electrical signals indicative of the charge flow that takes place at the area of the device to which the scanning radiation is directed. In this manner, a point-by-point readout in the form of electrical signals is obtained for the electrostatic image that was formed. ... The magnitude of the readout signal produced by the scanning process for a given area of the imaging plate structure **10** will, of course, vary inversely with the amount of imaging radiation that was received by the area. ... The laser beam **40** produces a modulated electrical signal at the output electrode **43**. ... A video signal can be electronically processed to produce an image that represents the latent image found in the surface charge of the photoconductive layer of the imaging plate structure **10**.

In contrast to the Modisette '985 patent, the infrared image generation device of amended independent Claim 1 includes a target plate having a second side, opposite the first side that receives the laser light, that displays an infrared image having portions of different respective temperatures. The Modisette '985 patent does not display an infrared image on or at the side that is opposed to the side that receives the input. For example, an infrared image is not displayed by conducting layer **22** that is positioned opposite to conductive layer **14** that receives the input radiation in the embodiment depicted in Figures 1-4. Moreover, the Modisette '985 patent does not teach or suggest displaying any type of infrared image having portions at different respective temperature, as also recited by amended independent Claim 1. Instead, the Modisette '985 patent describes the storage of an electrostatic image within a photoconductive layer of the

imaging plate structure and the subsequent electronic readout of the electrostatic image with the readout being in the form of electrical signals that are processed to create a corresponding video signal. Thus, the imaging plate structure of the Modisette '985 patent does not display any type of infrared image having portions at different temperatures as recited by amended independent Claim 1.

In an analogous manner, independent Claim 11 is directed to a method for generating an infrared image that includes providing laser light, scanning the laser light across a first side of a target plate and displaying at least one infrared image on a second side of the target plate, opposite the first side, in response to the laser light that has been scanned thereacross. As now further recited by amended independent Claim 11, the display of the at least one infrared image includes the display of an infrared image having portions at different respective temperatures. As described above in conjunction with amended independent Claim 1, the Modisette '985 patent does not teach or suggest the display of an infrared image on a second side of the target plate opposite the side across which laser light has been scanned. In fact, the Modisette '985 patent does not teach or suggest the display of any type of infrared image having portions at different respective temperatures as further recited by amended independent Claim 11.

For each of the foregoing reasons, amended independent Claims 1 and 11, as well as the claims that depend therefrom, are not taught or suggested by the Modisette '985 patent. Accordingly, the rejections of independent Claims 1 and 11, as well as the claims that depend therefrom, are overcome.

CONCLUSION

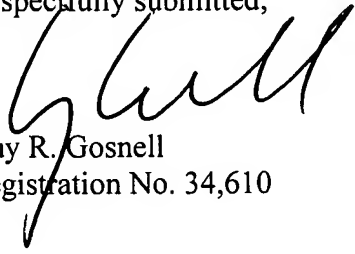
In view of the amendments and remarks presented above, it is respectfully submitted that all of the claims of the present application are in condition for immediate allowance. We therefore respectfully request that a Notice of Allowance be issued. The Examiner is encouraged to contact the Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application. It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time

Appl. No.: 10/670,448
Filed: September 25, 2003
Amdt. dated 02/09/2006



are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

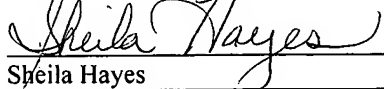
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CLT01/4786765v1

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